



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,264	02/21/2002	James L. Webber	DP-305654	9095

7590 07/11/2003

DELPHI TECHNOLOGIES, INC.  
Legal Staff  
Mail Code: 480-414-420  
P.O. Box 5052  
Troy, MI 48007-5052

EXAMINER

CULBRETH, ERIC D

ART UNIT	PAPER NUMBER
----------	--------------

3616

DATE MAILED: 07/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/080,264

Applicant(s)

WEBBER ET AL

Examiner

Eric D Culbreth

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because of the following informalities. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

a. In Figures 4-5, scallops 170 are still on the wrong side of the cam to prevent movement toward the seat restraint (i.e., they should be on the bottom of the cam, apparently with the pivot 168 at the opposite end of the cam). Noting applicant's remarks, the arrangement of Figures 4 and 5 as currently illustrated would cause the cam's scallops to pivot away from the cable when the cable moves toward the seat restraint).

### ***Response to Amendment***

2. The amendment filed 5/08/03 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: There is no support in the specification as originally filed for the amendment to the paragraph on page 18, line 21 through page 19, line 21 (torque lever length to clamping lever length).

Applicant is required to cancel the new matter in the reply to this Office Action.

Art Unit: 3616

*Specification*

3. The disclosure is objected to because of the following informalities: Page 19, lines 15-16 are not clear (ratio of what to what?). Because of the new matter objection above, the objection to the specification remains.

Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the independent claims throughout claims 1-28, the addition of the limitation that the cam rotates in a counterclockwise direction is indefinite (counterclockwise in relation to what? Every rotating member rotates clockwise and counterclockwise at the same time, depending on which side the member is viewed from).

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 29 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the

Art Unit: 3616

specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 29 is specific to Figures 4-5. As noted above, in that embodiment, the cam would not stop reverse travel as claimed because, in fact, the scallops in Figures 4-5 would pivot away from the cable.

*Claim Rejections - 35 USC § 102*

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2, 9, 16, 19, 23, and 25-28 as best understood are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Meyer et al (of record, cited by applicant). As indefinitely recited, Meyer et al's cam rotates counterclockwise when from the side opposite the side shown in the drawings.

10. Claims 3-4 and 20 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer et al.

Plate 17 is a frame for operative connection to vehicle structure as functionally recited (i.e., via the aperture in the side wall to the left of cable 10). The cam is pivotally connected to the frame (claim 3) and plate 17 has a base wall at the bottom and opposed side walls capturing cable 10 and the cam (claims 4 and 20).

*Claim Rejections - 35 USC § 103*

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 29 as best understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al.

As noted above, Meyer et al teaches plate or frame 17 for connection to vehicle structure, a housing 13 with a movable cylinder 14 in it, and cable 10 with buckle assembly 11 above the frame. The cable's other end is attached to the piston and a gas generator 15 expels gas to move the piston. Cam 16 pivots on the frame to generate a clamping force to clamp the cable between the cam and clamping surface to prevent reverse travel. However, Meyer et al does not teach the clamping surface at an angle greater than zero relative to a longitudinal axis of the housing nor

Art Unit: 3616

the clamping force being generated toward the seat restraint. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Meyer et al to include the clamping surface being at an angle greater than zero relative to the longitudinal axis of the housing as an obvious matter of design choice, as the specification gives no stated reason or particular purpose for the angle of the clamping surface, and the invention would appear to work just as well with the clamping surface parallel to the axis just like Meyer et al (and just like Figures 1-3 of the instant application, where no advantage is stated of the embodiment of Figures 4-5 over Figures 1-3). Case law also holds (In re Japiske, 86 USPQ 70 (CCPA 1950)) that there would be no invention in shifting parts disclosed in the prior art to a different position when the operation of the device would not thereby be modified.

14. Claims 5-7 and 21 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Wier.

Meyer et al does not teach an aperture through the base wall of the frame. Wier discloses in Figure 2 an aperture in a base wall of u-shaped frame 16 for cable 14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Meyer et al to include an aperture in the base wall as taught by Wier in order to better guide the cable as it retracts the safety restraint (claims 5 and 21). Meyer et al, teaches a cable fitting for connection to the seat restraint (i.e., some structure or device at the top of cable 10 of Meyer connects the buckle 11 and cable 10) (claim 6), and in the combination the cable would extend through Wier's aperture with one end of the cable connected to the cable fitting and the other end connected to piston 14 of the movable mechanism (claim 7).

Art Unit: 3616

15. Claims 8 and 22 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Wier as applied to claims 7 and 21 above, and further in view of Isaji et al.

Meyer et al and Wier do not teach a cable guide in the aperture. Isaji et al teaches member 129 guiding a cable 105B in a base aperture. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Meyer et al and Wier to include a member in the base aperture guiding the cable attached to the buckle in the combination as taught by Isaji et al in order to buffer the buckle when it retracts (column 4, lines 21-23 of Isaji et al).

16. Claims 10-12, 15 and 24 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Greiner.

Meyer et al does not teach a seal in an annular groove in the piston, nor a pyrotechnic device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Meyer et al to include a groove and seal on the piston and a pyrotechnic device as taught by Greiner (column 2, lines 10-20) in order to conventionally generate gas and seal around the piston so that the gas moves the piston efficiently.

17. Claims 13-14 and 17 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Downie et al.



Art Unit: 3616

Meyer et al does not teach the gas generator portion having a larger diameter than the piston portion. Meyer et al's tube 13 is circular, as indicated by the lines near the top of the tube in front of piston 14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Meyer et al to have a larger diameter gas generator portion as taught by Downie et al (note generant 15 in a larger area) in order to reduce pressure when slack is present (column 2, lines 2-12).

18. Claim 18 as best understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al in view of Downie et al as applied to claim 17 above, and further in view of Greiner.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Meyer et al and Downie et al to include a pyrotechnic device as taught by Greiner in order to conventionally move the piston.

### *Conclusion*

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 3616

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are 703/746-3508 for regular communications and 703/308-2571 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Eric D Culbreth  
Primary Examiner  
Art Unit 3616

*Eric Culbreth*  
*7/10/03*

ec  
July 10, 2003